

CLAIMS

1. A method for abstracting device names in a system, comprising the operations of:

receiving a logical name indicating a device type of physical device present in a
5 system;

selecting a physical device in the system, the physical device having a device type indicated by the logical name; and

determining a physical device name for a software component representing the selected physical device.

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2. A method as recited in claim 1, further comprising the operation of providing the physical device name to a requesting application program, wherein the physical device name is a character string.

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3. A method as recited in claim 1, further comprising the operation of providing a handle to the software component to a requesting application program.

4. A method as recited in claim 1, wherein the logical name is a generic character string indicating a device type of physical device present in a system.

5. A method as recited in claim 1, wherein the software component is a logical device object, the logical device object including a physical device implementation code segment capable receiving device data from a physical device, the
5 logical device object further including an application programming interface (API) in communication with a physical device implementation code segment, wherein the API is capable of receiving the device data from the physical device code segment.

6. A method as recited in claim 5, wherein an application program can
10 communicate with the API to access the device data.

7. A method as recited in claim 1, further comprising the operation of registering software components representing physical devices in the system with a logical device manager, the logical device manager capable of receiving the logical name
15 from an application program.

8. A computer program embodied on a computer readable medium, the computer program capable of abstracting device names in a system:

computer program instructions that receive a logical name indicating a device
20 type of physical device present in a system;

computer program instructions that select a physical device in the system, the physical device having a device type indicated by the logical name; and

computer program instructions that determine a physical device name for a software component representing the selected physical device.

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9. A computer program as recited in claim 8, further comprising computer program instructions that provide the physical device name to a requesting application program, wherein the physical device name is a character string.

10 10. A computer program as recited in claim 8, further comprising computer program instructions that provide a handle to the software component to a requesting application program.

11. A computer program as recited in claim 8, wherein the logical name is a
15 generic character string indicating a device type of physical device present in a system.

12. A computer program as recited in claim 8, wherein the software component is a logical device object, the logical device object including a physical device implementation code segment capable receiving device data from a physical device, the
20 logical device object further including an application programming interface (API) in

communication with a physical device implementation code segment, wherein the API is capable of receiving the device data from the physical device code segment.

13. A computer program as recited in claim 12, wherein an application
5 program can communicate with the API to access the device data.

14. A computer program as recited in claim 8, further comprising computer
program instructions that register software components representing physical devices in
the system with a logical device manager, the logical device manager capable of
10 receiving the logical name from an application program.

15. A system for abstracting device names in a system, comprising:

an application program;

a logical device manager capable of providing access to a particular software
15 component in response to receiving a software component type request from the
application program; and

a software component capable of performing a particular function, the software
component having a software component type, the software component further having a
software component name,

wherein the application program provides a logical name indicating a software component type present in the system, and wherein the logical device manager determines the software component name based on the software component type.

5 16. A system as recited in claim 15, wherein the logical device manager provides the software component name to the application program, wherein the physical device name is a character string.

 17. A system as recited in claim 15, wherein the logical device manager
10 provides a handle to the software component to the application program.

 18. A system as recited in claim 15, wherein the software component type request is a generic character string indicating a type of software component present in a system.

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 19. A system as recited in claim 15, wherein the software component is a logical device object, the logical device object including a physical device implementation code segment capable receiving device data from a physical device, the logical device object further including an API in communication with a physical device

implementation code segment, wherein the API is capable of receiving the device data from the physical device code segment.

20. A system as recited in claim 19, wherein the application program can
5 communicate with one of the API and logical device to access the device data.